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| 10/713,614 | 11/14/2003 | Robert J. Nolan | 0011388.00274 | 2513 |

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| EXAMINER | |
|---|---|
| CLEVELAND, MICHAEL B | |
| ART UNIT | PAPER NUMBER |
| 1762 | |

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/713,614 | NOLAN ET AL. | |
| | Examiner | Art Unit | |
| | Michael Cleveland | 1762 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *13 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *43-55* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 43-55 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/28/2005.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7, 9-11, 13, 19-22, 24, 26-28, 30-32, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Dupont et al. (U.S. Patent Application 2002/0187705, hereafter '705).

'705 teaches a method of coating a fluorescent light tube (10) having opposing end caps with electrically conductive pins (18) extending from at least one of the end caps, the method comprising the steps:

a) loading the fluorescent light tube on a coating conveyor system [0022];

b) feeding the fluorescent light tube to a coating station, which includes a coating machine [0021];

c) applying a coating to the fluorescent light tube with the electrically conductive pins uncovered (Fig. 2) at the coating station [0020]; and

d) conveying said fluorescent light tube to a stacking and/or packaging station [0022].

Claim 2: Excess coating is removed from the ends of the article ([0026]; also compare Figs. 2 and 3).

Claims 3-5, 19-21: A plurality of articles is loaded to form a chain of articles with gaps therebetween, and the coating is applied to the chain and gaps to connect the sequentially coated light tubes. Each article is separated after the coating step (Fig. 2; [0026]).

Claims 6, 11: The coated bulb is cooled below the softening point of the thermoplastic material [0006].

Claims 7, 13: A vacuum is applied during the coating process [0021].

Claim 9: The coating step extrudes a molten thermoplastic material [0021].

Claims 10: The fluorescent tubes (10) are conveyed sequentially in longitudinal alignment with one another (Figs. 1, 2, 8). The coating extrudes molten thermoplastic material around each tube substantially in direct intimate contact with the tube [0021].

Claims 22, 36: The coated tubes are taken up by rolls to draw them away from the extruder. The coating thins, indicating that the leading lamp must be accelerated away from the trailing lamp [0022].

Claims 24-28: One of ordinary skill in the art would have understood that a process of the complexity that requires the coordination of simultaneously performing the large number of operations of '705 would have been controlled by a computer (i.e., automatically).

Claims 30-32: The thickness of the coating may be about 16 mil [0027].

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 24, 26-28 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '705.

'705 is discussed above. It is the examiner's position that one of ordinary skill in the art would have understood that a process of the complexity that requires the coordination of simultaneously performing the large number of operations of '705 would have been controlled by a computer (i.e., automatically), but '705 does not explicitly so state. However, it has long been held that automating a manual activity is not sufficient to distinguish over the prior art (MPEP 2144.04.III).

Claims 33-35: '705 is silent as to the distance between end caps of sequential tubes. However, this distance would have been recognized as a result-effective variable because the amount of space between tubes affects the total amount of space required for the apparatus and the amount of excess polymer coating between tubes that is discarded, and the amount of safe room for the cutting process to separate the tubes. It has been held that the discovery of the optimum value of a result effective variable in a known process is ordinarily within the skill in the art. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

7. Claims 6, 11, 15-18, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '705, as applied to claim 1, and further in view of Weingarten (U.S. Patent 3,706,216, hereafter '216).

'705 is discussed above. The lamp must inherently be impelled to bring it to the extruder. '705 does not explicitly teach that the lamp is impelled after cooling. However, '216 teaches that in extrusion processes, the extrusion coated articles may be impelled for further processing after being forcibly cooled (col. 4, line 56-col. 5, line 5), such as cutting. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have impelled the lamps of '705 after the desired cooling step for further processing such as cutting with a reasonable expectation of success because '216 teaches that such is a suitable order of operations for cooling and separating extrusion-coated lengths of material. The selection of something based on its known suitability for its intended use has been held to support a *prima facie* case of obviousness. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

Claim 16-18: As discussed above, '216 teaches that cooling with a water bath or with air are operative methods of cooling an extrusion coated substrate. therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have accomplished the cooling of '705 using a water bath or air with a reasonable expectation of success because '216 teaches that they are suitable methods of cooling extrusion coated substrates.

8. Claims 8, 12, 14, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '705, as applied to claim 1, and further in view of Sica (U.S. Patent 6,043,600, hereafter '600).

'705 is discussed above, but does not explicitly teach heating the end caps before loading or conveying the tube. '705 does not explicitly describe the process of attaching the end caps to the tube. However, the Examiner takes Official Notice that it is notoriously well known to attach the end caps to the fluorescent tube by surrounding them with a sleeve and heating. See, e.g., '600, col. 2, lines 29-39. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have attached the end caps to the tube of '705 by heating because such is known in the art that such is a suitable method of assembling the end caps and fluorescent tube.

Claim 14: '705 teach infrared heat is suitable to heat end caps [0024].

Claim 25: It is the examiner's position that one of ordinary skill in the art would have understood that a process of the complexity that requires the coordination of simultaneously performing the large number of operations of '705 would have been controlled by a computer (i.e., automatically), but '705 does not explicitly so state. However, it has long been held that automating a manual activity is not sufficient to distinguish over the prior art (MPEP 2144.04.III).

9. Claims 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '705, as applied to claim 1, and further in view of Duzyk et al. (U.S. Patent 5,532,549, hereafter '549).

'705 is discussed above. Excess coating is removed from the end caps of the lamps ([0026]; also compare Figs. 2 and 3). '705 does not explicitly teach labeling the tubes. However, the examiner takes Official Notice that it is notoriously well known to label fluorescent lamps to provide useful information. See, e.g., '549, col. 9, lines 1-5. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have labeled the lamp of '705 with a reasonable expectation of success in order to have provided information to the consumer.

It is the examiner's position that one of ordinary skill in the art would have understood that a process of the complexity that requires the coordination of simultaneously performing the large number of operations of '705 would have been controlled by a computer (i.e., automatically), but '705 does not explicitly so state. However, it has long been held that automating a manual activity is not sufficient to distinguish over the prior art (MPEP 2144.04.III).

10. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '705, as applied to claim 1, and further in view of Payne (WO02/16049, hereafter '049).

'705 is discussed above. It does not explicitly teach the rate at which the lamps are conveyed. '049 teaches that a suitable rate for linking together fluorescent lamp tubes with an extrudable coating is about 6-49 ft./min. (p. 8, lines 4-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used such a rate with a reasonable expectation of success because '049 teaches that it is a suitable rate for linking together fluorescent lamp tubes with an extrudable coating.

11. Claims 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '705, as applied to claim 1, and further in view of Weingarten '216, as applied to claim 6 and Sica '600, as applied to claim 8. See also the further discussion of claims 3, 6, 7, 10, 22, and 24 above.

12. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont '325 in view of Weingarten '216 and Sica '600, as applied to claim 38, and further in view of Duzyk '549 for substantially the same reasons given regarding claim 23.

***Response to Arguments***

13. Applicant's arguments, see pp. 9-10, filed 2/13/2006, with respect to the rejection(s) of claim(s) 1-42 under 35 USC 112, 2nd paragraph, 35 USC 102 and 35 USC 103 have been fully considered and are persuasive in view of the amendments to the claims. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly cited Dupont '705.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cleveland whose telephone number is (571) 272-1418. The examiner can normally be reached on Monday-Thursday, 7-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Cleveland
Primary Examiner
Art Unit 1762

11/10/2005